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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,395	05/04/2005	Kazauko Fujii	2005_0320A	3251
513 7590 04/01/2009 WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503				
EXAMINER				
PENG, KUO LIANG				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
04/01/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,395

**Applicant(s)**

FUJII ET AL.

**Examiner**

Kuo-Liang Peng

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/22/08 Amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### DETAILED ACTION

1. The Applicants' amendment filed December 22, 2008 is acknowledged. Claims 1-15 are deleted. Claims 16-23 are amended. Now, Claims 16-23 are pending.
2. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

### *Claim Rejections - 35 USC § 112*

3. Claims 16-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In Claim 16, Examiner is not able to find the basis for R being an alkyl group of 12 **or more** carbon atoms. (Emphasis added)

For Applicants' argument (Remarks, page 7, 3<sup>rd</sup> paragraph), Examiner disagrees. Although Applicants' examples disclose the employment of dodecyltriethoxysilane and octadecyltriethoxysilane, there is no basis for an alkyltrialkoxysilane having alkyl group of 12 or more carbon atoms.

4. Claims 16-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 16 (line 5), the range " $0.5 \leq x \leq 2$ " causes confusion.

For Applicants' argument (Remarks, page 8, whole page), Examiner disagrees. Examiner's position in the previous Office action still applies here. Furthermore, the definition is clearly set forth in Claim 16, where x is a ratio of Si atoms bonded with **four oxygen atoms** with respect to **total Si atoms**. (Emphasis added) As such, there are only **two types** of Si atoms. **One** is the Si atoms that are bonded with four oxygen atoms; while **the other** is those are **not** bounded with four oxygen atoms. Therefore, x can not be greater than 1.0. Otherwise, the following improper statement would be "valid": The ratio of the number of red apples to the total number of the apples in the basket is greater than 1.0. In other words, the relative amount of the red apples is more than 100% with respect to total apples in the basket. Since the indefiniteness issue of x value, at this moment, Examiner is not in a position to verify the support for the previous amendment of the formula " $\text{RSi}_{1+x}\text{O}_{1.5+2x+0.5z}\text{L}_z)_m$ ". **Applicants are advised that once the definition of x is properly modified, an explanation/verification of the formula**

**“ $\text{RSi}_{1+x}\text{O}_{1.5+2x+0.5z}\text{L}_z$ ”<sub>m</sub>” should be provided accordingly to properly address the basis for the previous amendment of the formula.**

In Claim 18 (line 3), the “Si” has open valences.

***Claim Rejections - 35 USC § 103***

5. Claims 16-23 are rejected under 35 U.S.C. 103(a) as anticipated by Holmes-Farley (US 5 175 027).

Holmes-Farley discloses a method of preparing an alkyl siloxane coating composition by hydrolyzing/condensing a tetraalkoxysilane and optionally an alkyltrialkoxysilane in the presence of a base, preferably ammonium hydroxide. (col. 4, line 4 to col. 5, line 2) The alkyltrialkoxysilane can be octadecyltriethoxysilane. (Examples) The solid content (i.e., the content of tetraalkoxysilane and optionally alkyltrialkoxysilane) is described in col. 5, lines 50-55. Holmes-Farley is silent on the claimed reaction temperature. However, the reaction temperature can affect the reaction rate. In other words, the reaction temperature is a Result-Effective variable. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the reaction at whatever temperature through routine experimentation in order to achieve a desired reaction rate. Especially, Applicants do not show the criticality of

the reaction temperature. See MPEP 2144.05 (II). Notably, Holmes-Farley's method is substantially the same as the claimed one, Examiner has reasonable basis to believe the alkyl siloxane produced should possess the characteristics set forth in the claimed invention.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp  
March 28, 2009

/Kuo-Liang Peng/  
Primary Examiner, Art Unit 1796

